

REMARKS/ARGUMENTS

At the outset, applicants would like to thank Examiner Prouty for her time and consideration of the present application at the interview of October 9, 2003 with the undersigned agent. At the interview, the contentions of the outstanding Official Action were discussed.

Applicants believe that the present application has been amended in a manner that places it in condition for allowance at the time of the next Official Action.

Claims 15 and 19-25 are pending in the present application. Claims 1-9, 11-14, and 17-18 have been canceled. Claims 15 and 20-23 have been amended to more particularly point out and distinctly claim the present invention. New claims 24 and 25 have been added. Support for new claims 24 and 25 may be found in original claims 15 and 20, respectively.

In the outstanding Official Action, claim 15 was objected to for reciting the term "nucleic acid construct gene". The Official Action stated that this term was awkward and redundant.

In the interest of advancing prosecution, this term has been amended to recite "nucleic acid construct". Applicants would like to thank the Examiner for her suggestion as to how to overcome this objection.

The outstanding Official Action also objected to claim 18 on the grounds that it did not further limit the subject matter of a previous claim.

As noted above, claim 18 has been canceled. Thus, it is believed that the present amendment obviates these objections.

The Official Action objected to claim 23 for reciting the term "β(2-6)" without reciting the term "linked D-". Claim 23 has been amended to incorporate the phrase "linked D-" following the term "β(2-6)" in line 3 of the claim. Applicants would again like to thank Examiner Prouty for her suggestion as to how to overcome this objection.

Claims 20-22 were rejected under 35 USC 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. This rejection is respectfully traversed. Applicants believe that the present amendment renders moot this rejection.

Claims 20-22 have been amended so that claim 20 is now dependent on claim 15. Moreover, claims 21 and 22 have been amended to recite that the mixture may be added together with a "food or beverage composition". Thus, it is believed that claims 20-22 are definite to one of ordinary skill in the art.

In the outstanding Official Action, claims 15 and 18-22 were rejected under 35 USC 112, first paragraph, as allegedly

being based on a non-enabling disclosure. It is believed that the present amendment obviates this rejection.

In imposing the rejection, the Official Action acknowledged that the present disclosure was enabling for methods of using fructosyltransferases having at least 85% amino acid sequence identity to SEQ ID Nos. 1 or 11. However, the Official Action alleged that the present disclosure does not enable a method for using any fructosyltransferases having at least 75% amino acid sequence identity to SEQ ID Nos. 1 or 11.

Applicants believe that the present specification is enabling for a method utilizing a fructosyltransferase having at least 75% amino acid sequence identity to SEQ ID No. 1 or 11. However, in the interest of advancing prosecution, the claims have been amended to recite that the fructosyltransferases exhibit at least 85% amino acid sequence identity to their respective sequence identification numbers. As a result, it is believed that the claimed invention is supported by an enabling disclosure and respectfully request that the rejection be withdrawn.

Claims 15, 17-20 and 23 were rejected under 35 USC 102(b) as allegedly being anticipated by VAN GEEL-SCHUTTEN et al. (1999) or VAN GEEL-SCHUTTEN et al. (1998). This rejection is respectfully traversed.

The Examiner's attention is respectfully directed to amended claim 15 and new claim 24. Amended claim 15 is directed to a process of producing a fructo-oligosaccharide or fructo-polysaccharide, having  $\beta(2-1)$  linked D-fructosyl units. The reaction partner may be selected from a protein having fructosyltransferase activity, which exhibit at least 85% amino acid identity, as determined by a BLAST algorithm, with an amino acid sequence of SEQ ID No. 1, or a recombinant host cell containing one or more copies of a nucleic acid construct encoding for and capable of expressing such a protein.

Claim 24 is directed to a process for producing a fructo-oligosaccharide or fructo-polysaccharide having  $\beta(2-6)$  linked D-fructosyl units. The method comprises forming a mixture by combining sucrose with a recombinant host cell containing one or more copies of a nucleic acid construct gene encoding for a protein having fructosyltransferase activity, which exhibits at least 85% amino acid identity, as determined by a BLAST algorithm, within an amino acid of SEQ ID No. 11.

Applicants respectfully submit that neither of the modes of producing fructo-oligosaccharides or fructo-polysaccharides as set forth in the claimed invention are disclosed or suggested by the VAN GEEL-SCHUTTEN et al. articles. Indeed, neither publication, alone or in combination with each other, discloses or suggests a) a process of making fructo-oligosaccharide or fructo-

polysaccharide having  $\beta(2-1)$  linked D-fructosyl units using SEQ ID NO:1, or variants thereof having 85% identity and fructosyltransferase activity or a recombinant host encoding this enzyme; or b) a process of making fructo-oligosaccharide or fructo-polysaccharide having  $\beta(2-6)$  linked D-fructosyl units using a recombinant host transformed with a nucleic acid encoding SEQ ID NO:11 or variant thereof having 85% identity to SEQ ID NO:11 and having fructosyltransferase activity.

As a result, applicants believe that the cited publications fail to anticipate or render obvious the claimed invention.

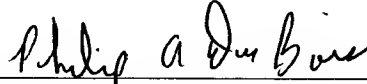
In view of the present amendment and the foregoing remarks, therefore, it is believed that this application is now in condition for allowance, with claims 15 and 19-25, as presented. Allowance and passage to issue on that basis are accordingly respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 25-0120 for any additional  
fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



---

Philip A. DuBois, Reg. No. 50,696

745 South 23<sup>rd</sup> Street  
Arlington, VA 22202  
Telephone (703) 521-2297

PD/fb